



Eurex Clearing Resources Circulars & Mailings

Release date: 25 Oct 2019 | Eurex Clearing

No. 097/2019

EurexOTC Clear Release 10.0: Amendments to the Clearing Conditions and FCM Regulations of Eurex Clearing AG

Eurex Clearing Circular 097/2019

1. Introduction

This circular contains information about changes and amendments to the Clearing Conditions of Eurex Clearing AG (Clearing Conditions) and the FCM Regulations of Eurex Clearing AG (FCM Regulations) with respect to the following topics of EurexOTC Clear Release 10.0:

- A. Decommissioning of 12M GBP LIBOR
- B. Changes to the Variation Margin formula
- C. Introduction of €STR and €STR-Euribor basis swaps
- D. Editorial changes and additional clarification regarding fallbacks of permanent index cessation

The amendments to the Clearing Conditions and the FCM Regulations will become effective as of **18 November 2019**.

2. Required action

Clearing Members, Basic Clearing Members, Disclosed Direct Clients of Eurex Clearing AG, FCM Clearing Members, vendors and all other affected contractual parties should take the amendments to the Clearing Conditions and FCM Regulations of Eurex Clearing AG into account.

3. Details

A. Decommissioning of 12M GBP LIBOR

Eurex Clearing will discontinue the product offerings with the reference interest rate of the 12M GBP LIBOR due to the illiquidity of the curve. Accordingly, the Stub Periods will be allowed up to 7M in case the currency is British pound (GBP).

To reflect the changes and amendments, the following provisions of the Clearing Conditions and FCM Regulations shall be amended as outlined in the Attachments 1 and 2:

- Chapter VIII Part 2 Number 2.1.5.1 of the Clearing Conditions
- Chapter VIII Part 4 Number 4.1.5.1 of the Clearing Conditions
- Chapter II Part 2 Number 2.1.5.1 of the FCM Regulations

B. Changes to the Variation Margin formula

Eurex Clearing will adopt changes to the Variation Margin formula for transactions covered by Chapter VIII of the Clearing Conditions and Chapter II of the FCM Regulations, respectively. With these changes, next-day cashflows (fees and coupons) will be discounted in the Variation Margin calculation in order to ensure cash flow flatness in case of a post-trade event.

For trades in a given trade currency, Variation Margin will also be calculated on currency payment calendar holidays if these are business days according to the TARGET calendar.

The following provisions of the Clearing Conditions and FCM Regulations shall be amended as outlined in the Attachments 1 and 2:

- Chapter VIII Part 2 Numbers 2.1.7 and 2.2.1 of the Clearing Conditions
- Chapter VIII Part 3 Numbers 3.1.7 and 3.2.1 of the Clearing Conditions
- Chapter VIII Part 4 Numbers 4.1.7 and 4.2.1 of the Clearing Conditions
- Chapter II Part 2 Number 2.2.1 of the FCM Regulations

C. Introduction of €STR and €STR-Euribor basis swaps

In order to facilitate the transition from EONIA to €STR, Eurex Clearing accept the following €STR-based products:

- Euro overnight index swaps (fix for float) referencing the €STR benchmark (up to 50 years)
- Eligibility of overnight interest swaps (OIS) denominated in euro with a spread on the floating leg of the trade (the spread is treated as simple interest above the self-compounding floating rate)
- €STR-Euribor (up to 50 years) basis swaps and EONIA-Euribor basis swaps (float for float)

All cleared OTC derivatives referencing the €STR benchmark will reside under a common EONIA-based discounting and Price Alignment Interest (PAI) regime like all other OTC derivatives denominated in euro.

The content of the daily distributed interest rate sensitivity report CC233 will be enhanced for OIS denominated in euro by splitting the sensitivity to EONIA into a discounting and forwarding value. This allows to estimate the impact of a shift in discounting levels for EONIA-based OIS as well.

To ensure transparency, and alongside productive reports (under EONIA-based discounting), reports containing trade level net present values (NPVs) and interest rate DV01s (rate deltas) based on €STR as the discount curve will be published for information purposes.

To reflect these changes and amendments, the following provisions of the Clearing Conditions and FCM Regulations shall be amended as outlined in the Attachments 1 and 2:

- Chapter VIII Part 2 Numbers 2.1.5.1, 2.2.5 and 2.2.7 of the Clearing Conditions
- Chapter II Part 2 Numbers 2.1.5.1, 2.2.5 and 2.2.7 of the FCM Regulations

D. Additional clarification regarding fallback of permanent index cessation and further minor changes

Effective 2 October 2019 and as announced with Eurex Clearing circular 085/19, Eurex Clearing implemented trigger events and a fallback waterfall in case an index ceases to exist permanently. A subsequent clarification will be added to provide explicitly, in line with bilateral market practice, that an index recommended by the central bank or the regulatory supervisory of the index administrator may be used.

Eurex Clearing will adopt further minor changes, among others, to streamline the product-specific terms for certain swaps.

The following provisions of the Clearing Conditions and FCM Regulations shall be amended as outlined in the Attachments 1 and 2:

- Chapter VIII Part 1 Number 1.8.2 of the Clearing Conditions
- Chapter VII Part 2 Numbers 2.3.2, 2.3.3, 2.3.4, 2.3.5, 2.4.2 and 2.4.3 of the Clearing Conditions
- Chapter II Part 1 Number 1.8.2 of the FCM Regulations
- Chapter II Part 2 Numbers 2.3.2, 2.3.3, 2.3.4, 2.3.5, 2.4.2 and 2.4.3 of the FCM Regulations

All of the amendments above will become effective on 18 November 2019.

As of the effective date, the full version of the amended Clearing Conditions and FCM Regulations will be available for download on the Eurex Clearing website www.eurexclearing.com under the following link:

Resources > Rules and Regulations > Clearing Conditions

The changes and amendments to the legal framework of Eurex Clearing AG published by this circular are deemed accepted by each affected contractual party of Eurex Clearing AG, unless the respective contractual party objects by written notice to Eurex Clearing AG within the first ten (10) Business Days after publication. Any ordinary right of Eurex Clearing AG to terminate the respective contract (including a Clearing Agreement, if applicable) shall remain unaffected.

Unless the context requires otherwise, terms used and not otherwise defined in this circular shall have the meaning ascribed to them in the Clearing Conditions or FCM Clearing Conditions of Eurex Clearing AG, as applicable.

Attachments:

- 1 Amended sections in Chapter VIII of the Clearing Conditions
- 2 Amended sections in Chapter II of the FCM Regulations

Recipients:	All Clearing Members, Basic Clearing Members, Disclosed Direct Clients of Eurex Clearing AG, FCM Clearing Members, vendors and all other affected contractual parties
Target groups:	Front Office/Trading, Middle + Back Office, IT/System Administration, Auditing/Security
Contact:	client.services@eurexclearing.com
Related Eurex Clearing circular:	071/19
Authorized by:	Heike Eckert
Further informati	on

Attachment 1 to Eurex Clearing circular 097/19

Attachment 2 to Eurex Clearing circular 097/19

Navigate to Eurex News

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Chapter VIII of the Clearing Conditions of Eurex Clearing AG

Clearing of OTC Interest Rate Derivative Transactions, OTC FX Transactions and OTC XCCY Transactions

As of 18.11.2019

	Eurex04e
Clearing Conditions of Eurex Clearing AG	As of 18.11.2019
	Page 1
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[...]

Part 1 General Provisions

[...]

1.8 Index-related Provisions

[...]

1.8.2 Permanent Index Cessation

[...]

(3) [...]

[...]

(c) If an index is formally designated, nominated or recommended by (i) the competent central bank for the currency of the relevant index, the regulatory supervisor for either the relevant index or the Index Administrator, or any working group or committee officially endorsed or convened by any of the foregoing authorities, a group of any of the foregoing authorities, or the Financial Stability Board, or any part thereof, or (ii), if (i) does not apply, the Index Administrator of the relevant index as a fallback, then, as of the Index Cessation Date, this index shall be applied as the Successor Index, provided that Eurex Clearing states in accordance with Chapter I Part 1 Number 16.1 of the Clearing Conditions that it is operationally and legally capable to use this fallback.

[...]

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Clearing Conditions of Eurex Clearing AG	As of 18.11.2019
	Page 2

Part 2 Clearing of OTC Interest Rate Derivative Transactions

2.1 General Provisions

[...]

2.1.5 Novation Criteria and Process Regarding OTC Interest Rate Derivative Transactions

[...]

2.1.5.1 Transaction Type Specific Novation Criteria

[...]

- (7) [...]
 - (c) For IRS floating payments, the floating rates for Interest Rate Stub Periods must be specified in the Trade Record submitted via the ATS as follows:

[...]

(bb) a floating rate index tenor is specified, which is used for the fixing in respect of the Interest Rate Stub Period. The following tenors (W = week(s), M = month(s), Y = year) are eligible: in case the currency is EUR: 1W, 1M, 3M, 6M, 1Y; in case the currency is GBP: 1W, 1M, 2M, 3M, 6M, 1Y; in case the currency is USD, GBP, CHF or JPY: 1W, 1M, 2M, 3M, 6M. Only neighboring tenors of the Interest Rate Stub Period length are allowed (e.g. 3M or 6M for Interest Rate Stub Period length 3M+1W). In case the currency is DKK, SEK, NOK or PLN, only subcase (aa) is accepted; or

[...]

(dd) a floating rate index tenor is specified, which is used for the fixing in respect of the Interest Rate Stub Period. The following tenors (W = week(s), M = month(s), Y = year) are eligible: in case the currency is EUR 2W, 3W, 2M, 4M, 5M, 7M, 8M, 9M, 10M, 11M; in case the currency is GBP: 2W, 4M, 5M, 7M, 8M, 9M, 10M, 11M; in case the currency is USD, GBP, CHF or JPY: 2W, 4M, 5M, 7M. In this case, a linear interpolation as laid out in subcase (cc) will be applicable.

[...]

(8) Floating rate indices

The floating rate index (Floating Rate Option or base rate) must be one of the following:

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Clearing Conditions of Eurex Clearing AG	As of 18.11.2019
	Page 3

[...]

(n) CHF-SARON-OIS-COMPOUND

(o) EUR-EuroSTR-COMPOUND

where:

For Paragraphs (a) - (e) and (j) - (m), the payment is between the period end date and the second Business Day following the period end date. The fixing for Paragraphs (a) - (e) and (k) - (n) is between ten Business Days prior to the period start date and the period start date;

for Paragraphs (h), (i), (n) and (no), the payment is between the period end date and the second Business Day following the period end date;

[...]

[...]

2.1.7 Margin Requirements

[...]

(4) [...]

PAI shall be calculated and payable for each currency on each Business Day with respect to each CTM Interest Rate Derivative Transaction in accordance with the following formulas.

For PLN and CHF, PAI is defined as:

$$PAI(T) = -MtM_{ex}CF(T-1) * ONR(T,T+1) * YF(T,T+1),$$

where:

" $MtM_exCF(T-1) = MtM(T-1) - DCF(T-1,T)$ " is the present value of the previous Business Day excluding today's <u>discounted</u> cash flows from coupons or fees

[...]

For T+2 currencies (JPY, DKK, SEK, and NOK) VM is settled on T+2 (in contrast to EUR, USD, GBP, CHF and PLN where VM is settled on T+1). Thus, PAI for T+2 currencies is defined as:

$$PAI(T) = -MtM_{ex}CF(T-2) * ONR(T,T+1) * YF(T,T+1),$$

with

$$MtM_{ex}CF(T-2) = MtM(T-2) - DCF(T-24, T-1) - DCF(T-24, T).$$

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 4

[...]

[...]

2.2 General product-related terms for OTC Interest Rate Derivative Transactions

[...]

2.2.1 Payment Obligations

[...]

- (5) [...]
 - (b) [...]

IRS PAA shall be calculated and payable for each currency on each Business Day with respect to each STM Interest Rate Derivative Transaction in accordance with the following formulas.

For PLN and CHF, IRS PAA is defined as:

$$IRS PAA(T) = -MtM_exCF(T-1) * ONR(T,T+1) * YF(T,T+1),$$

where:

"MtM_exCF(T-1) = MtM (T-1) - DCF (T-1,T)" is the present value of the previous Business Day excluding today's cash flows from coupons or fees discounted to T-1,

[...]

For T+2 currencies (JPY, DKK, SEK, and NOK) the IRS STM Amount is settled on T+2 (in contrast to EUR, USD, GBP, CHF and PLN where the IRS STM Amount is settled on T+1). Thus, IRS PAA for T+2 currencies is defined as:

$$IRS PAA(T) = -MtM_exCF(T-2)*ONR(T,T+1)*YF(T,T+1),$$

with

 $MtM_exCF(T-2) = MtM(T-2)-\underline{D}CF(\underline{T-2},T-1)-\underline{D}CF(\underline{T-2},T).$

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 5

2.2.5 Rates for calculating the Floating Amount

(1) The applicable Relevant Rate (in case of ISDA Interest Rate Derivative Transactions) or Base Rate (in case of DRV Interest Rate Derivative Transactions) applied by Eurex Clearing AG in calculating Floating Amounts will be set out in the OTC Trade Novation Report on the basis of the floating rate index specified in the Trade Record transmitted to Eurex Clearing AG via the ATS whereby:

[...]

(j) "CHF-SARON-OIS-COMPOUND", "USD-Federal Funds-H.15-OIS-COMPOUND", "GBP-SONIA-COMPOUND", "EUR-EONIA-OIS-Compound", "EUR-EuroSTR-COMPOUND", "JPY-TONA-OIS-COMPOUND" will be calculated as set out in Number 2.2.7 below.

[...]

[...]

2.2.7 OIS Rate Calculation

[...]

"EUR-EONIA-OIS-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the arithmetic mean of the daily rates of the day to day-Euro Overnight Index Average (EONIA)Euro-zone interbank euro money market).

The EURQ-EONIA-OIS-COMPOUND will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a) of the 2006 ISDA Definitions or, in the case of DRV Interest Rate Derivative Transactions, Number 2.4 Paragraph (3) below, but to the nearest one tenthousandth of a percentage point (0.0001 per cent):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{EONIA_i \times n_i}{360}\right) - 1\right] \times \frac{360}{d}$$

where:

"do", for any Calculation Period, is the number of TARGET Settlement Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to d₀, each representing the relevant TARGET Settlement Days in chronological order from, and including, the first TARGET Settlement Day in the relevant Calculation Period;

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 6

- "EONIAi"; for any day "i" in the relevant Calculation Period, is a reference rate equal to the overnight rate as calculated by the European Central Bank and appearing on the Reuters Screen EONIA Page in respect of that day;
- " n_i ", is the number of calendar days in the relevant Calculation Period on which the rate is EONIA; and
- "d" is the number of calendar days in the relevant Calculation Period.

"EUR-EuroSTR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the the euro short term rate (€STR)).

The EUR-EuroSTR-COMPOUND will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a) of the 2006 ISDA Definitions or, in the case of DRV Interest Rate Derivative Transactions, Number 2.4 Paragraph (3) below, but to the nearest one tenthousandth of a percentage point (0.0001 per cent):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{EuroSTR_i \times n_i}{360}\right) - 1\right] \times \frac{360}{d}$$

where:

- <u>"do"</u>, for any Calculation Period, is the number of TARGET Settlement Days in the relevant Calculation Period;
- <u>"f"</u> is a series of whole numbers from one to d₀, each representing the relevant TARGET Settlement Day in chronological order from, and including, the first TARGET Settlement Day in the relevant Calculation Period;
- <u>"EuroSTRi"</u>; for any day "i" in the relevant Calculation Period, is a reference rate equal to to EuroSTR in respect of that day as published on the ECB's Website;
- "EuroSTR" is the euro short term rate (€STR) provided by the European Central Bank as administrator of the benchmark (or a successor administrator) on the ECB's Website:
- "<u>ni</u>", is the number of calendar days in the relevant Calculation Period on which the rate is EuroSTR_i:
- "d" is the number of calendar days in the relevant Calculation Period.

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 7

<u>"ECB's Website"</u> means the website of the European Central Bank at https://www.ecb.europa.eu/home/html/index.en.html, or any successor source (as defined in Section 7.2 (b) of the 2006 ISDA Definitions).

_"GBP-SONIA-COMPOUND" means that the rate for a Reset Date calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the Sterling daily overnight reference rate).

[...]

2.3 Terms for ISDA Interest Rate Derivative Transactions

[...]

2.3.2 Terms for ISDA Fixed Rate-Floating Rate Swaps

In addition to the general terms for ISDA Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant OTC Trade Novation Report shall apply to ISDA Interest Rate Swaps that are fixed rate-floating rate swaps: (including, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

[...]

Floating Amounts:

[...]

(i) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

2.3.3 Terms for ISDA Floating Rate-Floating Rate Swaps

In addition to the general <u>provisionsterms</u> for ISDA Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant OTC Trade Novation Report, shall apply to ISDA Interest Rate Swaps that are floating rate-floating rate swaps ("basis" swaps) (including, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

(a) Floating Rate Payer 1:

[...]

(viii) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

	Eurex04e
Clearing Conditions of Eurex Clearing AG	As of 18.11.2019
	Page 8

(b) Floating Rate Payer 2:

[...]

(viii) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

2.3.4 Terms for ISDA Overnight Interest Rate Swap Transactions

In addition to the general terms for ISDA Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant OTC Trade Novation Report, shall apply to ISDA Interest Rate Swaps that are overnight interest rate swap transactions:

- 1. Fixed Amounts:
 - (a) Fixed Rate Payer
 - (b) Fixed Rate Payer Payment Dates or Period End Dates, if Delayed Payment or Early Payment applies (subject to adjustment in accordance with any applicable business day convention)
 - (c) Fixed Rate and Fixed Rate Day Count Fraction
- 2. Floating Amounts:
 - (a) Floating Rate Payer
 - (b) Floating Rate Payer Payment Dates or Period End Dates, if Delayed Payment or Early Payment applies (subject to adjustment in accordance with any applicable business day convention)
 - (c) Floating Rate for initial Calculation Period, if applicable
 - (d) Floating Rate Option
 - (e) Reset Dates being the last day of each Calculation Period (subject to adjustment in accordance with any applicable business day convention)
 - (f) Compounding ("straight") or Flat Compounding shall not be applicable.

2.3.52.3.4 Terms for ISDA Forward Rate Agreements

[...]

2.3.62.3.5 Terms for ISDA Zero Coupon Inflation Swaps

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 9

2.4 Terms for DRV Interest Rate Derivative Transactions

[...]

2.4.2 Terms for Fixed Rate-Floating Rate DRV Interest Rate Swaps

In addition to the general terms for DRV Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant OTC Trade Novation Report, shall apply to fixed rate-floating rate DRV Interest Rate Swaps (including-OIS, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

(a) Fixed rate payer (Zahler der Festbeträge)

[...]

(k) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

2.4.3 Terms for Floating Rate-Floating Rate DRV Interest Rate Swaps

In addition to the general terms for DRV Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant OTC Trade Novation Report, shall apply to floating rate-floating rate swaps ("basis" swaps) (including, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

(a) Floating rate payer 1 (Zahler der variablen Beträge 1):

[...]

(vi) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

(b) Floating rate payer 2 (Zahler der variablen Beträge 2):

[...]

(vi) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

2.4.4 Terms for DRV Forward Rate-Agreements

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 10

Part 3 Clearing of OTC FX Transactions

3.1 General Provisions

[...]

3.1.7 Margin Requirements

[...]

(2) [...]

The Variation Margin Requirement and/or any Redelivery Amount shall be calculated in USD with respect to each CTM FX Transaction in accordance with the following formula:

$$\begin{split} VM_{\$}(t) &= NPV_{\$}(t) - NPV_{\$}(t-1) + DCF_{\$}(t-1,t) - DCF_{\$}(t,t+1) + \\ & \underline{+}DCF_{\texttt{E};\texttt{E}}(t-1,t) \cdot FX(t-1) - DCDF_{\texttt{E};\texttt{E}}(t,t+1) \cdot FX(t) \end{split}$$

where:

FX(t) denotes the FX spot rate at time t for EUR/USD or GBP/USD;

 $\underline{\textit{DCF}(t,t+1)}$ denotes trade related cash flows in the respective currency at time $\underline{t+1}$ discounted to time t with the relevant currency-dependent discount factor; and

[...]

(3) [...]

FX PAI shall be calculated and payable on each Business Day with respect to each CTM FX Transaction in accordance with the following formula:

$$FX PAI(T) = -MtM_{ex}CF(T-1) * ONR(T-1,T) * YF(T,T+1)$$

where:

" $MtM_exCF(T-1) = MtM(T-1) - DCF(T-1,T)$ " is the present value of the previous Business Day excluding today's trade related cash flows discounted to T-1;

[...]

3.2 Product-related terms for OTC FX Transactions

Eurex04e
As of 18.11.2019
Page 11

3.2.1 Payment obligations

[...]

(4) [...]

(a) [...]

The FX STM Amount shall be calculated in USD with respect to each STM FX Transaction in accordance with the following formula:

$$\begin{split} FX\,STM\,Amount_{\S}(t) \\ &= NPV_{\S}(t) - NPV_{\S}(t-1) + DCF_{\S}(t-1,t) - DCF_{\S}(t,t+1) \\ &+ DCF_{\S:\pounds}(t-1,t) \cdot FX(t-1) - DCF_{\S:\pounds}(t,t+1) \cdot FX(t) \end{split}$$

where:

FX(t) denotes the FX spot rate at time t for EUR/USD or GBP/USD;

 $\underline{\textit{DCF}(t,t+1)}$ denotes trade related cash flows in the respective currency at $\underline{\textit{time}}$ $\underline{\textit{t+1}}$ discounted to time t; and

NPV(t) denotes the net present value of the trade at time t.

(b) [...]

FX PAA shall be calculated on each Business Day with respect to each STM FX Transaction in accordance with the following formulas.

$$FX PAA(T) = -MtM_{ex}CF(T-1) * ONR(T-1,T) * YF(T,T+1)$$

where:

" $MtM_exCF(T-1) = MtM(T-1) - DCF(T-1,T)$ " is the present value of the previous Business Day excluding today's trade related <u>discounted</u> cash flows;

[...]

[...]

Part 4 Clearing of OTC XCCY Transactions

4.1 General Provisions

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 12

4.1.5 Novation Criteria and Process Regarding OTC XCCY Transactions

[...]

4.1.5.1 Transaction Type Specific Novation Criteria

[...]

(6) Shortened or extended calculation period (stub period)

[...]

(c) The floating rates for XCCY Stub Periods must be specified in the trade record submitted via the ATS as follows:

[...]

(bb) a floating rate index tenor is specified, which is used for the fixing in respect of the XCCY Stub Period. The following tenors (W = week(s), M = month(s), Y = year) are eligible: in case the currency is EUR: 1W, 1M, 3M, 6M, 1Y;, in case the currency is GBP: 1W, 1M, 2M, 3M, 6M, 1Y and in case the currency is USD or GBP: 1W, 1M, 2M, 3M, 6M. Only neighbouring tenors of the XCCY Stub Period length are allowed (e.g. 3M or 6M for XCCY Stub Period length 3M+1W);

[...]

(dd) a floating rate index tenor is specified, which is used for the fixing in respect of the XCCY Stub Period. The following tenors (W = week(s), M = month(s), Y = year) are eligible: in case the currency is EUR 2W, 3W, 2M, 4M, 5M, 7M, 8M, 9M, 10M, 11M; in case the currency is GBP: 2W, 4M, 5M, 7M, 8M, 9M, 10M, 11M and in case the currency is USD or GBP: 2W, 4M, 5M, 7M. In this case, a linear interpolation as laid out in lit. (cc) above will be applicable.

[...]

[...]

4.1.7 Margin Requirements

[...]

(2) [...]

The Variation Margin Requirement and/or any Redelivery Amount shall be calculated in USD with respect to each CTM XCCY Transaction in accordance with the following formula:

$$VM_{\$}(t) = NPV_{\$}(t) - NPV_{\$}(t-1) + DCF_{\$}(t-1,t) - DCF_{\$}(t,t+1) + DCF_{\$}(t,t+1)$$

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Clearing Conditions of Eurex Clearing AG	As of 18.11.2019
	Page 13
	Page 13

$$DCF_{\ell; \text{E}}(t-1, t) \cdot FX(t-1) - DCF_{\ell; \text{E}}(t, t+1) \cdot FX(t)$$

where:

FX(t) denotes the FX spot rate at time t for EUR/USD or GBP/USD;

 $\underline{\mathit{CDCF}}(t,t+1)$ denotes trade related cash flows in the respective currency at time $\underline{t+1}$ discounted to time \underline{t} , and

[...]

[...]

4.2 General product-related terms for OTC XCCY Transactions

[...]

- 4.2.1 Payment Obligations
 - [...]
 - (5) [...]
 - (a) [...]

The XCCY STM Amount shall be calculated in USD with respect to each STM XCCY Transaction in accordance with the following formula:

$$\begin{aligned} \textit{XCCY STM Amount}_{\$}(t) &= \textit{NPV}_{\$}(t) - \textit{NPV}_{\$}(t-1) + \textit{DCF}_{\$}(t-1,t) - \\ &\textit{DCF}_{\$}(t,t+1) + \textit{DCDF}_{\texttt{E};\texttt{E}}(t-1,t) \cdot \textit{FX}(t-1) - \textit{DCF}_{\texttt{E};\texttt{E}}(t,t+1) \\ &\cdot \textit{FX}(t) \end{aligned}$$

where:

FX(t) denotes the FX spot rate at time t for EUR/USD or GBP/USD;

 $\underline{\textit{DCF}(t,t+1)}$ denotes trade related cash flows in the respective currency at time t+1 discounted to time t, and

NPV(t) denotes the net present value of the trade at time t.

(b) [...]

XCCY PAA shall be calculated on each Business Day with respect to each STM XCCY Transaction in accordance with the following formulas.

$$XCCY\ PAA(T) = -MtM_{ex}CF(T-1) * ONR(T-1,T) * YF(T,T+1)$$

where:

Clearing Conditions of Eurex Clearing AG	Eurex04e
	As of 18.11.2019
	Page 14

" $MtM_exCF(T-1) = MtM(T-1) - DCF(T-1,T)$ " is the present value of the previous Business Day excluding today's trade related <u>discounted</u> cash flows;

[...]

[...]

Chapter II: Special Provisions for Clearing of Interest Rate Derivative Transactions
FCM Regulations of Eurex Clearing AG

As of 18.11.2019

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 2

THE FCM REGULATIONS WILL BE AMENDED.

AMENDMENTS ARE MARKED AS FOLLOWS:

INSERTIONS ARE UNDERLINED,

DELETIONS ARE CROSSED OUT.

[...]

Part 1 General Provisions[...]

1.8 Index-related Provisions

[...]

1.8.2 Permanent Index Cessation

[...]

(3) [...]

[...]

(c) If an index is formally designated, nominated or recommended by (i) the competent central bank for the currency of the relevant index, the regulatory supervisor for either the relevant index or the Index Administrator, or any working group or committee officially endorsed or convened by any of the foregoing authorities, a group of any of the foregoing authorities, or the Financial Stability Board, or any part thereof, or (ii), if (i) does not apply, the Index Administrator of the relevant index as a fallback, then, as of the Index Cessation Date, this index shall be applied as the Successor Index, provided that Eurex Clearing states in accordance with Chapter I Number 15.1 that it is operationally and legally capable to use this fallback.

[...]

8.11.2019
3
3

Part 2 Clearing of Interest Rate Derivative Transactions

2.1 General Provisions

[...]

2.1.5 Novation Criteria and Process Regarding Interest Rate Derivative Transactions

[...]

2.1.5.1 Specific Novation Criteria

The following specific novation criteria must be fulfilled for Interest Rate Derivative Transactions (based on the Trade Record transmitted to Eurex Clearing AG via the ATS):

[...]

(7) Shortened or extended calculation period (stub period)

[...]

(c) For IRS floating payments, the floating rates for Interest Rate Stub Periods must be specified in the Trade Record submitted via the ATS as follows:

[...]

(bb) a floating rate index tenor is specified, which is used for the fixing in respect of the Interest Rate Stub Period. The following tenors (W = week(s), M = month(s), Y = year) are eligible: in case the currency is EUR: 1W, 1M, 3M, 6M, 1Y; in case the currency is GBP: 1W, 1M, 2M, 3M, 6M, 1Y; in case the currency is USD, GBP, CHF or JPY: 1W, 1M, 2M, 3M, 6M. Only neighboring tenors of the Interest Rate Stub Period length are allowed (e.g. 3M or 6M for Interest Rate Stub Period length 3M+1W). In case the currency is DKK, SEK, NOK or PLN, only subcase (aa) is accepted; or

[...]

(dd) a floating rate index tenor is specified, which is used for the fixing in respect of the Interest Rate Stub Period. The following tenors (W = week(s), M = month(s), Y = year) are eligible: in case the currency is EUR 2W, 3W, 2M, 4M, 5M, 7M, 8M, 9M, 10M, 11M; in case the currency is GBP: 2W, 4M, 5M, 7M, 8M, 9M, 10M, 11M; in case the currency is USD, GBP, CHF or JPY: 2W, 4M, 5M, 7M. In this case, a linear interpolation as laid out in subcase (cc) will be applicable.

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 4

(8) Floating rate indices

The floating rate index (Floating Rate Option or base rate) must be one of the following:

[...]

(n) CHF-SARON-OIS-COMPOUND

(o) EUR-EuroSTR-COMPOUND

where:

For Paragraphs (a) - (e) and (j) - (m), the payment is between the period end date and the second Business Day following the period end date. The fixing for Paragraphs (a) - (e) and (k) - (n) is between ten Business Days prior to the period start date and the period start date;

for Paragraphs (h), (i), and (n) and (o), the payment is between the period end date and the second Business Day follow0ing the period end date;

for Paragraphs (f) and (g), payment is on the first or second Business Day following the period end date;

[...]

[...]

2.2 General product-related terms for Interest Rate Derivative Transactions

[...]

2.2.1 Payment Obligations

[...]

(5) [...]

(b) A Price Alignment Amount shall be payable by the FCM Clearing Member or Eurex Clearing AG, as the case may be, together with the Variation Settlement Amount.

[...]

PAA shall be calculated and payable for each currency on each Business Day with respect to each Interest Rate Derivative Transaction in accordance with the following formulas.

For PLN and CHF, PAA is defined as:

 $PAA(T) = -MtM_{ex}CF(T--1) * ONR(T,T+1) * YF(T,T+1),$

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 5

where:

"MtM_exCF(T-1) = MtM (T-1) - DCF (T-1,T)" is the present value of the previous Business Day excluding today's cash flows from coupons or fees discounted to T-1,

[...]

For T+2 currencies (JPY, DKK, SEK, and NOK) the Variation Settlement Amount is settled on T+2 (in contrast to EUR, USD, GBP, CHF and PLN where the Variation Settlement Amount is settled on T+1). Thus, PAA for T+2 currencies is defined as:

$$PAA (T) = -MtM_exCF(T-2)*ONR(T,T+1) * YF(T,T+1),$$

with

 $\mathsf{MtM}_\mathsf{exCF}(\mathsf{T}\text{-}2) = \mathsf{MtM}(\mathsf{T}\text{-}2)\text{-}\underline{\mathsf{D}}\mathsf{CF}(\underline{\mathsf{T}\text{-}2},\!\mathsf{T}\text{-}1)\text{-}\mathsf{DCF}(\underline{\mathsf{T}\text{-}2},\!\mathsf{T}).$

[...]

[...]

2.2.5 Rates for calculating the Floating Amount

(1) The applicable Relevant Rate (in case of ISDA Interest Rate Derivative Transactions) or Base Rate (in case of DRV Interest Rate Derivative Transactions) applied by Eurex Clearing AG in calculating Floating Amounts will be set out in the Swap Trade Novation Report on the basis of the floating rate index specified in the Trade Record transmitted to Eurex Clearing AG via the ATS whereby:

[...]

(j) "CHF-SARON-OIS-COMPOUND", "USD-Federal Funds-H.15-OIS-COMPOUND", "GBP-SONIA-COMPOUND", "EUR-EONIA-OIS-Compound", "EUR-EuroSTR-COMPOUND", "JPY-TONA-OIS-COMPOUND" will be calculated as set out in Number 2.2.7 below.

[...]

[...]

2.2.7 OIS Rate Calculation

[...]

"EUR-EONIA-OIS-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the Euro Overnight Index Average (EONIA) arithmetic mean of the daily rates of the day to day Euro-zone interbank euro money market).

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 6

<u>The</u>"_EURO-EONIA-OIS-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a) of the 2006 ISDA Definitions or, in the case of DRV Interest Rate Derivative Transactions, Number 2.4 Paragraph (3) below, but to the nearest one tenthousandth of a percentage point (0.0001 per cent):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{EONIA_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

"d₀", for any Calculation Period, is the number of TARGET Settlement Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to d₀, each representing the relevant TARGET Settlement Days in chronological order from, and including, the first TARGET Settlement Day in the relevant Calculation Period;

"EONIAi"; for any day "i" in the relevant Calculation Period, is a reference rate equal to the overnight rate as calculated by the European Central Bank and appearing on the Reuters Screen EONIA Page in respect of that day;

" \mathbf{n}_i ", is the number of calendar days in the relevant Calculation Period on which the rate is EONIA; and

"d" is the number of calendar days in the relevant Calculation Period.

"EUR-EuroSTR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is the the euro short term rate (€STR)).

The EUR-EuroSTR-COMPOUND will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a) of the 2006 ISDA Definitions or, in the case of DRV Interest Rate Derivative Transactions, Number 2.4 Paragraph (3) below, but to the nearest one tenthousandth of a percentage point (0.0001 per cent):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{EuroSTR_i \times n_i}{360}\right) - 1\right] \times \frac{360}{d}$$

where:

"do", for any Calculation Period, is the number of TARGET Settlement Days in the relevant Calculation Period;

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 7

- <u>"f"</u> is a series of whole numbers from one to d₀, each representing the relevant TARGET Settlement Day in chronological order from, and including, the first TARGET Settlement Day in the relevant Calculation Period;
- <u>"EuroSTRi"</u>; for any day <u>"i"</u> in the relevant Calculation Period, is a reference rate equal to to EuroSTR in respect of that day as published on the ECB's Website;
- <u>"EuroSTR"</u> is the euro short term rate (€STR) provided by the European Central Bank as administrator of the benchmark (or a successor administrator) on the ECB's <u>Website:</u>
- "<u>n</u>i", is the number of calendar days in the relevant Calculation Period on which the rate is <u>EuroSTRi</u>;
- "d" is the number of calendar days in the relevant Calculation Period.
- <u>"ECB's Website"</u> means the website of the European Central Bank at https://www.ecb.europa.eu/home/html/index.en.html or any successor source (as defined in Section 7.2 (b) of the 2006 ISDA Definitions).

[...]

[...]

2.3 Terms for ISDA Interest Rate Derivative Transactions

[...]

2.3.2 Terms for ISDA Fixed Rate-Floating Rate Swaps

In addition to the general terms for ISDA Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant Swap Trade Novation Report shall apply to ISDA Interest Rate Swaps that are fixed rate-floating rate swaps (including, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

[...]

(2) Floating Amounts:

- (i) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)
- (j) if Compounding ("**straight**") or Flat Compounding is applicable: Compounding Dates.

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 8

2.3.3 Terms for ISDA Floating Rate-Floating Rate Swaps

In addition to the general provisions-terms for ISDA Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant Swap Trade Novation Report, shall apply to ISDA Interest Rate Swaps that are floating rate-floating rate swaps ("basis" swaps) (including, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

(1) Floating Rate Payer 1:

[...]

(h) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

(2) Floating Rate Payer 2:

[...]

(h) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

2.3.4 Terms for ISDA Overnight Interest Rate Swap Transactions

In addition to the general terms for ISDA Interest Rate Swaps, the following productspecific terms, which are specified in, or may be derived from, the relevant Swap Trade Novation Report, shall apply to ISDA Interest Rate Swaps that are overnight interest rateswap transactions:

- (1) Fixed Amounts:
 - (a) Fixed Rate Payer
 - (b) Fixed Rate Payer Payment Dates or Period End Dates, if Delayed Payment or Early Payment applies (subject to adjustment in accordance with any applicable business day convention)
 - (c) Fixed Rate and Fixed Rate Day Count Fraction
- (2) Floating Amounts:
 - (a) Floating Rate Payer
 - (b) Floating Rate Payer Payment Dates or Period End Dates, if Delayed Payment or Early Payment applies (subject to adjustment in accordance with any applicable business day convention)
 - (c) Floating Rate for initial Calculation Period, if applicable

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 9

- (d) Floating Rate Option
- (e) Reset Dates being the last day of each Calculation Period (subject to adjustment in accordance with any applicable business day convention)
- (f) Compounding ("straight") or Flat Compounding shall not be applicable.

2.3.52.3.4 Terms for ISDA Forward Rate Agreements

[...]

2.3.62.3.5 Terms for ISDA Zero Coupon Inflation Swaps

[...]

2.4 Terms for DRV Interest Rate Derivative Transactions

[...]

2.4.2 Terms for Fixed Rate-Floating Rate DRV Interest Rate Swaps

In addition to the general terms for DRV Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant Swap Trade Novation Report, shall apply to fixed rate-floating rate DRV Interest Rate Swaps (including , for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rateOIS):

[...]

(11) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

2.4.3 Terms for Floating Rate-Floating Rate DRV Interest Rate Swaps

In addition to the general terms for DRV Interest Rate Swaps, the following product-specific terms, which are specified in, or may be derived from, the relevant Swap Trade Novation Report, shall apply to floating rate-floating rate swaps ("basis" swaps) (including, for the avoidance of doubt, swaps where a floating rate is based on an overnight interest rate):

(1) Floating rate payer 1 (Zahler der variablen Beträge 1):

[...]

(f) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

(2) Floating rate payer 2 (Zahler der variablen Beträge 2):

	Eurex05e
FCM Regulations of Eurex Clearing AG	As of 18.11.2019
	Page 10

[...]

(f) Compounding ("**straight**") or Flat Compounding, if applicable (not applicable, in particular, for a floating rate that is based on an overnight interest rate)

[...]

[...]
